

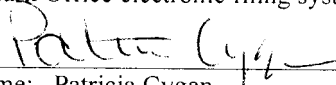
**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	Darren A. Janzig, Carl D. Wahlstrand, Paulette C. Olson and Robert M. Skime	Confirmation No.	4792
Serial No.:	10/730,877		
Filed:	December 09, 2003	Customer No.:	28863
Examiner:	Alyssa M. Alter	Group Art Unit:	3762
Docket No.:	1023-335US01		
Title:	LOW-PROFILE IMPLANTABLE MEDICAL DEVICE		

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CERTIFICATE UNDER 37 CFR 1.8 I hereby certify that this correspondence is being transmitted via the United States Patent and Trademark Office electronic filing system on October 2, 2009.

By:   
Name: Patricia Cygan

**REPLY BRIEF**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450,  
Alexandria, VA 22313-1450

Sir:

This Reply Brief is responsive to the Examiner's Answer dated August 3, 2009. The period of response for filing this Reply Brief runs through October 3, 2009.

No fees are believed to be due at this time. Please charge any additional fees that may be required or credit any overpayment to Deposit Account No. 50-1778.

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### **STATUS OF CLAIMS**

Claims 1–15, 17–32, and 34–36 are pending and are the subject of this appeal. Originally filed claims 16 and 33 were canceled in an Amendment filed on September 5, 2006. Claim 36 was added by way of an Amendment filed on August 4, 2008.

Claims 1–15 and 17–21 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Appellant regards as the invention.

Claims 1–9, 15, 17–19, 20–22, 29, 31, 32, 34, and 35 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Weinberg et al. (U.S. Patent No. 5,144,946, hereinafter “Weinberg ‘946”).

Claims 1, 9, 10, 15, 18–21, 32, and 35 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Weinberg et al. (U.S. Patent No. 5,674,260, hereinafter “Weinberg ‘260”).

Claims 22, 25, 26, 28–32, 34, and 35 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Engmark et al. (U.S. Patent Application Publication No. 2004/0082977, hereinafter “Engmark”).

Claims 10–14, 25, and 26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Weinberg ‘946.

Claims 11–14, 25, and 26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Weinberg ‘260.

Claims 8, 23, and 24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Weinberg ‘946 in view of Bardy et al. (U.S. Patent Application Publication No. 2002/0042634, hereinafter “Bardy”).

### **GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

Appellant submits the following grounds of rejection to be reviewed on appeal:

- (1) The first ground of rejection to be reviewed on appeal is the rejection of claims 1–15 and 17–21 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Appellant regards as the invention.
- (2) The second ground of rejection to be reviewed on appeal is the rejection of claims 1–9, 15, 17–22, 29, 31, 32, 34, and 35 under 35 U.S.C. § 102(b) as being anticipated by Weinberg ‘946.
- (3) The third ground of rejection to be reviewed on appeal is the rejection of claims 1, 9, 10, 15, 18–21, 32, and 35 under 35 U.S.C. § 102(b) as being anticipated by Weinberg ‘260.
- (4) The fourth ground of rejection to be reviewed on appeal is the rejection of claims 22, 25, 26, 28–32, 34, and 35 under 35 U.S.C. § 102(e) as being anticipated by Engmark.
- (5) The fifth ground of rejection to be reviewed on appeal is the rejection of claims 10–14, 25, and 26 under 35 U.S.C. § 103(a) as being unpatentable over Weinberg ‘946.
- (6) The sixth ground of rejection to be reviewed on appeal is the rejection of claims 11–14, 25, and 26 under 35 U.S.C. § 103(a) as being unpatentable over Weinberg ‘260.
- (7) The seventh ground of rejection to be reviewed on appeal is the rejection of claims 8, 23, and 24 under 35 U.S.C. § 103(a) as being unpatentable over Weinberg ‘946 in view of Bardy.
- (8) The eighth ground of rejection to be reviewed on appeal is the rejection of claim 36.

## ARGUMENT

In the Examiner's Answer to Appellant's Appeal Brief, the Examiner provided a clarification of the rejection of the claims. For brevity, this Reply Brief only addresses aspects of these new arguments. Accordingly, this Reply Brief is not intended to address all arguments provided in the Examiner's Answer, and Appellant requests full consideration of all arguments set forth in the Appeal Brief filed on April 9, 2009. Appellant respectfully requests separate review of each set of claims argued under separate headings in the Appeal Brief.

### FIRST GROUND OF REJECTION UNDER APPEAL

Claims 1–15 and 17–21 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Appellant regards as the invention. In support of the rejection of claims 1–15 and 17–21 under 35 U.S.C. § 112, second paragraph, the Examiner stated that there “there is insufficient antecedent basis for” the claimed feature “a second non-linear [sic] profile of the housing” in independent claim 1 “since there is no description in the specification for “a second profile.”<sup>1</sup> For at least the reasons discussed in the Appeal Brief, Appellant maintains that the language of independent claim 1 sufficiently apprises one of ordinary skill in the art of the scope of claim 1 and defines the invention with a reasonable degree of clarity and precision, and, therefore, is definite under 35 U.S.C. § 112, second paragraph.<sup>2</sup>

In the Examiner's Answer, the Examiner stated that because “there is no description or indication in the specification of what the Appellant considers the ‘second non-linear profile’, i.e. which axis or orientation, the examiner maintains that the limitations is unclear and lacks sufficient antecedent basis.”<sup>3</sup> As discussed in the Appeal Brief,<sup>4</sup> whether or not there is “antecedent basis” for claim language is not the proper standard for determining compliance with 35 U.S.C. § 112, second paragraph. Thus, to the extent the Examiner is relying on the failure of Appellant to specifically recite “a second non-linear profile” in the specification to support the

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<sup>1</sup> Final Office Action dated December 9, 2008 at page 2, item 1.

<sup>2</sup> MPEP 2173.02, citing *Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1366 (Fed. Cir. 2004) and *Soloman v. Kimberly-Clark Corp.*, 216 F.3d 1372, 1379 (Fed. Cir. 2000).

<sup>3</sup> Examiner's Answer at page 11.

<sup>4</sup> Appeal Brief at page 7.

rejection of claims 1–15 and 17–21 under 35 U.S.C. § 112, second paragraph, Appellant submits that the Examiner has failed to meet the burden of demonstrating that the claims are indefinite.

Moreover, claim 1 meets the requirements of 35 U.S.C. § 112, second paragraph. Appellant’s claim 1 specifies that integrated circuits or discrete components are arranged on respective surfaces of a circuit board to substantially conform to a first predetermined non-linear profile that is based on a second non-linear profile of the housing. Regardless of the axis or the orientation of in which the second non-linear profile of the housing is determined, one having ordinary skill in the art would understand that the integrated circuits and/or discrete components are arranged on the respective surfaces in order to substantially conform to a predetermined non-linear profile that is determined based on a non-linear profile of a housing. Even if a housing has a different non-linear profile depending on the orientation of the housing or the axis, the language of claim 1 clearly conveys that the non-linear profile with which the integrated circuits and/or discrete components are arranged has a particular relationship with a selected one of the non-linear profiles of the housing.

For at least these reasons and the reasons discussed in the Appeal Brief, Appellant submits that claim 1, and claims 2–15 and 17–21, which depend from claim 1, meet the limitations of 35 U.S.C. § 112, second paragraph. Reversal of the Examiner’s rejection of claims 1–15 and 17–21 under 35 U.S.C. § 112, second paragraph is respectfully requested.

## SECOND GROUND OF REJECTION UNDER APPEAL

Claims 1–9, 15, 17–22, 29, 31, 32, 34, and 35 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Weinberg ‘946.

In the Examiner’s Answer, the Examiner maintained that Weinberg ‘946 discloses an implantable medical device comprising integrated circuits or discrete components that are arranged on the respective one of the first or second surfaces to substantially conform to a first predetermined non-linear profile that is based on a second non-linear profile of the housing. The Examiner reasoned that because the electrical components 56 of the Weinberg ‘946 pacemaker (the “integrated circuits” according to the Examiner) are mounted on a platform, and fit in a housing that “includes a non-linear rounded corners (i.e. non-linear profile), the components are arranged [on a substrate 54] in a first predetermined non-linear profile ‘based’ on a second non-linear profile.”<sup>5</sup> The Examiner’s reasoning is erroneous because it vitiates the requirement that the integrated circuits or discrete components be arranged to substantially conform to a first predetermined non-linear profile that is based on a second non-linear profile of the housing. Weinberg ‘946 fails to disclose or even suggest that the electrical components 56 are arranged on the substrate 54 to substantially conform to any particular profile, much a profile that is based on the “rounded corners” of the housing, as the Examiner suggests.

Weinberg ‘946 is completely silent as to any relationship between a profile of the electrical components 56 and a profile of the housing 12 that houses the substrate 54. Therefore, even if the housing 12 has rounded corners, Weinberg ‘946 fails to support the Examiner’s assertion that the electrical components 56 are arranged on the substrate 54 to conform to a profile that is based on, e.g., has some relationship to, the rounded corners of the housing. As discussed in further detail in the Appeal Brief,<sup>6</sup> arranging the electrical components 56 of Weinberg ‘946 to fit in a housing 12 does not necessarily require a consideration of a specific profile of the electrical components 56 or a consideration of a non-linear profile of the housing 12.

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<sup>5</sup> Examiner’s Answer at page 12.

<sup>6</sup> See Appeal Brief at pages 11 and 12.

FIGS. 4A and 4B of Weinberg '946, which were cited by the Examiner, suggest that the objective of fitting the electrical components 56 within the housing 12 is not a consideration for the arrangement of the electrical components 56 on the substrate. Weinberg '946 even discloses that the electrical components 56 are covered with another structure within the housing 12, thereby decoupling the relationship between the profile of the electrical components 56 and the profile of the housing 12.

Weinberg '946 neither discloses nor suggests each and every element of Appellant's claim 1. Claims 2, 3, 5, 6, 9, and 19–21 depend from claim 1 and, therefore, Weinberg '946 also fails to disclose or suggest each and every element of claims 2, 3, 5, 6, 9, and 19–21. For at least these reasons and the reasons discussed in the Appeal Brief, the rejection of claims 1–3, 5, 6, 9, and 19–21 as being anticipated by Weinberg '946 should be reversed.

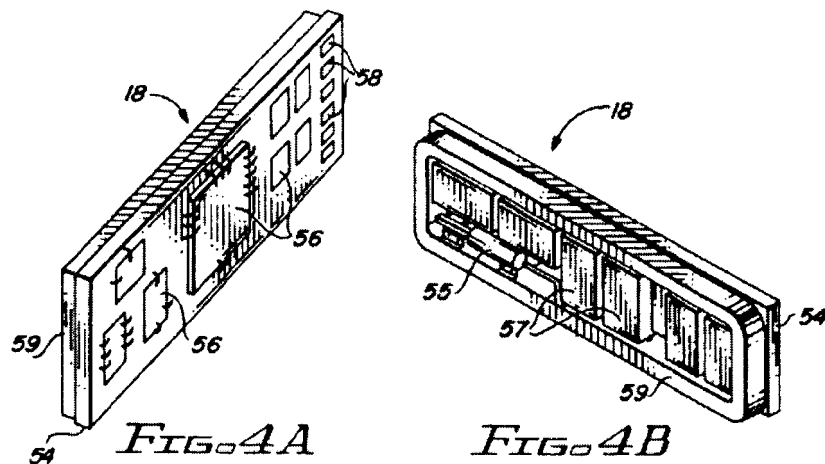
#### **CLAIM 4**

Claim 4 specifies that the IMD of claim 1 includes a telemetry coil within the housing that encircles the circuit board and is substantially uneclipsed by the circuit board. In support of the rejection of claim 4 as being anticipated by Weinberg '946, the Examiner asserted that FIG. 4B of Weinberg '946 illustrates the telemetry coil 59 encircling the substrate 54, which the Examiner characterized as a circuit board. The Examiner further asserted that FIG. 4B illustrates a telemetry coil 59 that is uneclipsed or unobstructed by the circuit board because “it protrudes from the circuit board or substrate 54.”<sup>7</sup> This assertion is erroneous. As illustrated in FIG. 4B of Weinberg '946 (reproduced below), even if the telemetry coil 59 protrudes from the substrate 54, the telemetry coil 59 remains eclipsed by the substrate 54. Therefore, Weinberg '946 fails to disclose or suggest a medical device comprising a telemetry coil within the housing that encircles the circuit board and is substantially uneclipsed by the circuit board, as required by Appellant's claim 4.

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<sup>7</sup> Examiner's Answer at p. 12.

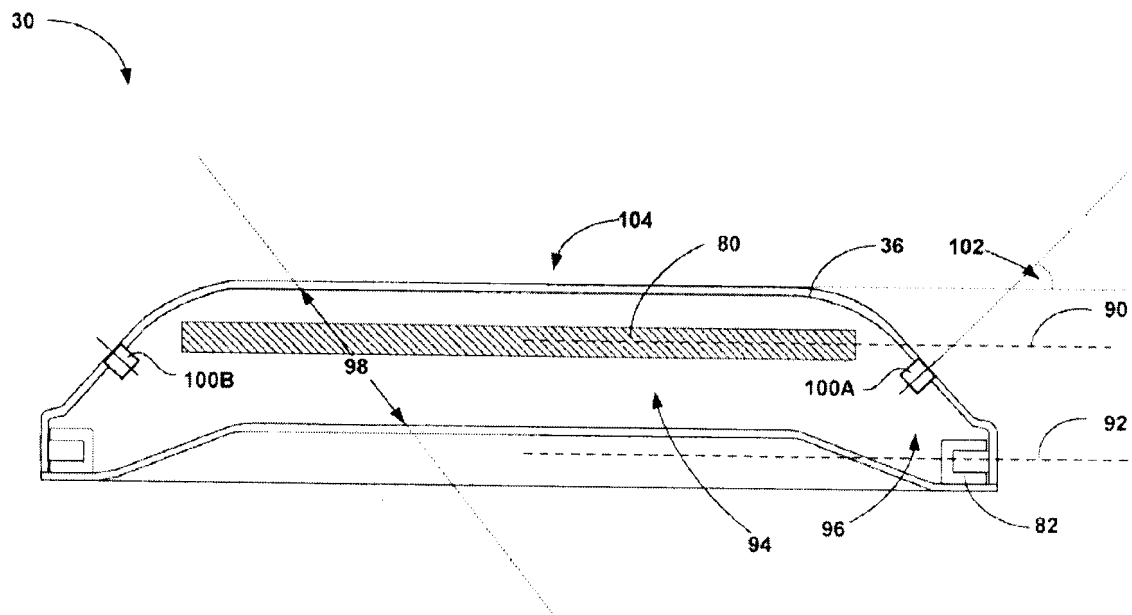




For at least these reasons and the reasons discussed in the Appeal Brief, Weinberg '946 fails to disclose or suggest the requirements of claim 4, and the rejection of claim 4 should be reversed.

#### CLAIM 7

Claim 7 states that the housing of claim 1 includes a central portion and a taper portion, where the circuit board is located within the central portion and a telemetry coil is located within the taper portion. FIG. 6 of Appellant's disclosure illustrates an example of an implantable medical device that includes a housing comprising a central portion 94 and a taper portion 96, whereby a circuit board 80 is in the central portion 94 and a telemetry coil 82 is in the taper portion 96.

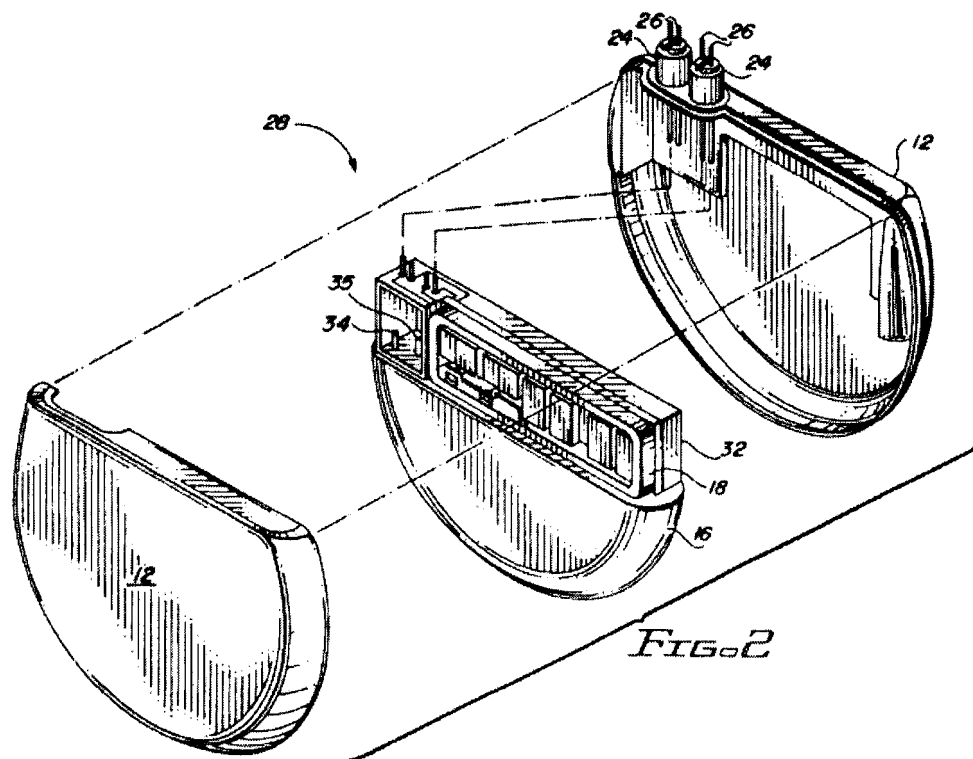


**FIG. 6**

In the Examiner's Answer, the Examiner clarified the rejection of claim 7 under 35 U.S.C. § 102(b) as being anticipated by Weinberg '946. The Examiner characterized rounded edges of the Weinberg '946 device housing as a taper portion and reasoned that because "the coil extends towards the taper portion . . . the telemetry coil [is] located in the tapered portion."<sup>8</sup> The Examiner's characterization of Weinberg '946 is erroneous, and the rejection of claim 7 on this basis should be reversed.

As shown in FIG. 2 (reproduced below) of Weinberg '946, the housing 12 does not define a central portion and a taper portion.

<sup>8</sup> Examiner's Answer at p. 12.



Moreover, it is unclear how FIG. 2 of Weinberg '946 or any other disclosure therein discloses an arrangement in which the substrate 54 (the "circuit board" according to the Examiner) is located within a central portion of the housing and a telemetry coil 59 is located within a taper portion of the housing. The telemetry coil 59 and substrate 54 are part of the electronic package 18 of Weinberg '946, which is shown in FIG. 2.<sup>9</sup> As FIG. 2 illustrates, the entire electronics package 18 is the portion of the housing 12 that the Examiner appeared to characterize as the "central portion." FIG. 2 fails to illustrate the telemetry coil 59 in the rounded part of the housing 12 (the "taper portion" according to the Examiner) and the substrate 54 in a central portion, as the Examiner asserted FIG. 2 illustrates. Therefore, the Examiner erroneously asserted that FIG. 2 of Weinberg '946 illustrates a medical device in which a circuit board is located within a central portion of a housing and a telemetry coil is located within a taper portion of the housing.

<sup>9</sup> Weinberg '946, col. 5, ll. 35-45.

Furthermore, it is unclear how FIG. 2 of Weinberg '946 illustrates a telemetry coil 59 that "extends toward the tapered portion" of the housing 12, as asserted by the Examiner. Instead, FIG. 2 illustrates a telemetry coil 59 (shown in detail in FIG. 4B of Weinberg '946, reproduced above) that extends from the substrate 54 in a direction parallel to the rounded edges of the housing 12, which the Examiner characterized as the "taper portion."

For at least these reasons and the reasons discussed in the Appeal Brief, the rejection of claim 7 as being anticipated by Weinberg '946 was erroneous and should be reversed.

### **CLAIM 8**

Claim 8 requires the housing of the IMD that houses the circuit board to have a non-linear profile, and the integrated circuits and/or discrete components to be arranged on the circuit board to substantially conform to the non-linear profile of the housing. In the Examiner's Answer, the Examiner clarified the rejection of claim 8 as being anticipated by Weinberg '946. The Examiner reasoned that the components 56 of the Weinberg '946 device "are in fact arranged in a non-linear profile with respects to second non-linear profile of the housing as depicted in figures 4A & 4B."<sup>10</sup> FIGS. 4A and 4B of Weinberg '946, however, fail to support the Examiner's assertion that the components 56 (the "integrated circuits" according to the Examiner) of the Weinberg '946 device are arranged in a predetermined non-linear profile, much less a non-linear profile that substantially conforms to a non-linear profile of the housing 12.

Neither FIG. 4A nor FIG. 4B or any other disclosure provided by Weinberg '946 supports the Examiner's assertion that the electrical components 56 are arranged on the substrate 54 to substantially conform to the "rounded corners"<sup>11</sup> of the Weinberg '946 device housing 12, which the Examiner characterized as the "non-linear profile." Weinberg '946 is completely silent as to any relationship between the arrangement of the electrical components 56 on the substrate 54 and the "rounded corners"<sup>12</sup> of the housing 12. Even if the electrical components 56 are arranged in a predetermined non-linear profile, as asserted by the Examiner, Weinberg '946

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<sup>10</sup> Examiner's Answer at p. 13.

<sup>11</sup> Examiner's Answer at p. 12.

<sup>12</sup> Examiner's Answer at p. 12.

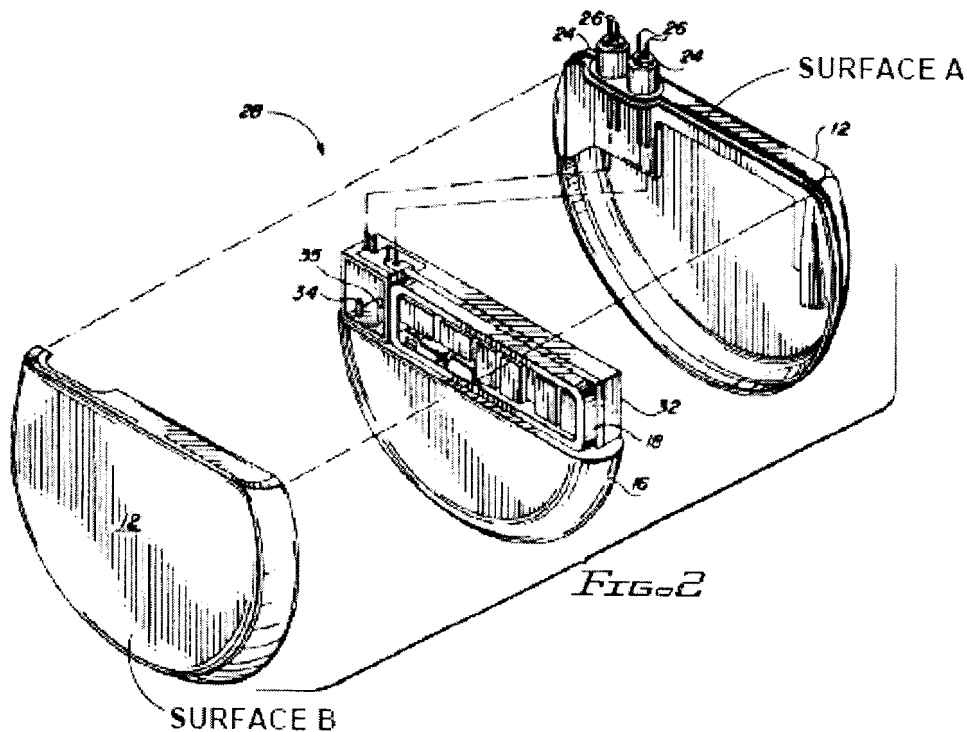
does not suggest that the profile of electrical components 56 comprises a profile of the housing 12.

For at least these reasons and the reasons discussed in the Appeal Brief, claim 8 is not anticipated by Weinberg '946 and the rejection of claim 8 should be reversed.

### **CLAIMS 15, 17, AND 18**

Claim 15 requires a housing of the IMD of claim 1 to comprise a feedthrough on a side surface that is oriented at a non-parallel, non-perpendicular angle relative to a major surface of the housing. The Examiner asserted that claim 15 is anticipated by Weinberg '946 and clarified that “the rounded bottom” of the Weinberg '946 medical device is considered to be the major surface. Appellant respectfully disagrees with this analysis.

The “rounded bottom” of the Weinberg '946 cannot reasonably be characterized as a major surface of the device housing 12. While the “the rounded bottom” of the Weinberg '946 housing 12 is a surface, the “rounded bottom” in no way defines a major surface of the device housing 12. As one having ordinary skill in the art would understand, a major surface is greater in size relative to other surfaces of the housing. Weinberg '946 fails to disclose or suggest that the “rounded bottom” of the housing 12 has a relatively greater size than other surfaces. In fact, FIG. 2 (an annotated version is reproduced below) of Weinberg '946 suggests that a surface (labeled Surface B by Appellant) other than the “rounded bottom” of the housing 12 can reasonably be characterized as a major surface of the housing 12.



As discussed in the Appeal Brief,<sup>13</sup> FIG. 2 of Weinberg '946 illustrates feedthroughs 24 that are located on a surface (labeled "Surface A" above) of the housing 12, where Surface A appears to be substantially perpendicular to a major surface (e.g., "Surface B" labeled above) of the housing 12. Claim 15 requires the surface on which the feedthrough is on, i.e., Surface A in FIG. 2 of Weinberg '946 reproduced above, to be substantially non-parallel and non-perpendicular, to a major surface of the housing, i.e., Surface B in FIG. 2 of Weinberg '946. Thus, at least FIG. 2 of Weinberg '946 demonstrates that claim 15 is unanticipated by Weinberg '946.

For at least these reasons and the reasons discussed in the Appeal Brief, the rejection of claim 15, as well as claims 17 and 18, which depend from claim 15 should be reversed.

<sup>13</sup> Appeal Brief at pp. 15 and 16.

## CLAIMS 22 AND 29–31

Independent claim 22 is directed to an IMD that comprises a circuit board, a telemetry coil that encircles the circuit board, and a housing to house the circuit board and the telemetry coil. According to claim 22, the circuit board is located substantially within a first plane and the telemetry coil is located substantially within a second plane that is different than the first plane, the first and second planes are substantially parallel, and the telemetry coil is substantially uneclipsed by the circuit board in a direction substantially perpendicular to at least one of the first or second planes.

In the Examiner's Answer, the Examiner stated that FIG. 4B of Weinberg '946 depicts "that the telemetry coil 59 is uneclipsed or unobstructed by the circuit board since it protrudes and is thus in a different plane from the circuit board."<sup>14</sup> This rationale, however, fails to take into consideration the language of claim 22 that specifies that the telemetry coil is substantially uneclipsed by the circuit board in a direction substantially perpendicular to at least one of the planes in which the telemetry coil 59 and substrate 54 are located. Thus, even if the telemetry coil 59 of Weinberg '946 protrudes from the substrate 54 and is in a different plane than the substrate 54, as the Examiner asserts, the telemetry coil 59 is not substantially uneclipsed by the substrate 54 in a direction substantially perpendicular to at least one of the planes in which the telemetry coil 59 and substrate 54 are located. Instead, as illustrated in FIG. 4B (reproduced above) of Weinberg '946, the telemetry coil 59 is completely eclipsed by the substrate 54 in a direction substantially perpendicular to at least one of the planes in which the telemetry coil 59 and substrate 54 are located.

For at least these reasons and the reasons discussed in the Appeal Brief, Weinberg '946 neither discloses nor suggests each and every element of Appellant's independent claim 22. Claims 29–31 depend from claim 22 and, therefore, are also patentable over Weinberg '946. Reversal of the rejection of claims 22 and 29–31 is respectfully requested.

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<sup>14</sup> Examiner's Answer at p. 13.

### **CLAIMS 32, 34, AND 35**

Independent claim 32 is directed to an IMD comprising a housing that includes a major surface and a side surface, wherein the side surface includes a feedthrough that is oriented at a non-parallel, non-perpendicular angle relative to the major surface. Independent claim 32 was rejected under 35 U.S.C. § 102(b) as being anticipated by Weinberg '946. In the Examiner's Answer, the Examiner clarified that the "rounded bottom" of the housing 12 of the Weinberg '946 device is considered to be the major surface. As discussed above with respect to claim 15, this characterization of Weinberg '946 is erroneous.

FIG. 2 of Weinberg '946 illustrates feedthroughs 24 that are substantially perpendicular to a major surface of the housing 12, rather than substantially non-parallel and non-perpendicular, as required by claim 32. Thus, Weinberg '946 fails to anticipate independent claim 32. The rejection of independent claim 32, as well as claims 34 and 35, which depend from claim 32, as being anticipated by Weinberg '946 should be reversed.

### **THIRD GROUND OF REJECTION UNDER APPEAL**

Claims 1, 9, 10, 15, 18–21, 32, and 35 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Weinberg '260.

### **CLAIMS 1, 9, AND 19–21**

Weinberg '260 fails to disclose each and every limitation set forth in independent claim 1. In support of the rejection of claim 1 as being anticipated by Weinberg '260, the Examiner characterized the platform 36 and substrate 38 described by Weinberg '260 as a circuit board.<sup>15</sup> Even if the platform 36 and substrate 38 define a circuit board, Weinberg '260 fails to disclose or even suggest that the integrated circuits 34 or electronic components are arranged on the platform 36 and substrate 38 to substantially conform to a predetermined non-linear profile that is based on a non-linear profile of a housing that houses the platform 36 and substrate 38, as required by Appellant's claim 1. As with Weinberg '946, Weinberg '260 is completely silent as

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<sup>15</sup> Final Office Action dated December 9, 2008 at p. 5, item 2.



to any relationship between a profile of the integrated circuits 34 or electronic components on the platform 36 and substrate 38 and a profile of an of the housing that houses platform 36 and substrate 38.

As discussed in further detail in the Appeal Brief,<sup>16</sup> fitting the integrated circuits 34, 40 within the housing 12 of the Weinberg ‘260 device does not appear to be a consideration for the arrangement of the integrated circuits 34, 40 on the platform 36 and substrate 38. Moreover, asserting that Appellant’s claim 1 is anticipated by a medical device in which require integrated circuits or discrete components that are arranged on respective surfaces of a circuit board to fit in a housing, rather than to substantially conform to a first predetermined non-linear profile that is based on a second non-linear profile of the housing, reflects a misunderstanding of Appellant’s claim 1. The Examiner’s interpretation of claim 1 as merely requiring integrated circuits or discrete components that are arranged on respective surfaces of a circuit board to fit in a housing is inconsistent with Appellant’s specification, which is impermissible.<sup>17</sup>

Appellant’s disclosure provides examples of devices in which integrated circuits or discrete components that are arranged on respective surfaces of a circuit board to substantially conform to a first predetermined non-linear profile that is based on a second non-linear profile of the housing. For example, Appellant’s disclosure states that in some examples, “integrated circuits and/or discrete components can be arranged on [a] circuit board according to height to conform to a predetermined non-linear profile, e.g., to better conform to the concavity of the housing.”<sup>18</sup> Thus, Appellant’s disclosure indicates a profile of integrated circuits or discrete components on a circuit board is selected based on, e.g., dependent on, the profile of the housing. In contrast, fitting the integrated circuits 34, 40 within the housing 12 of the Weinberg ‘260 device does not necessarily affect the profile of the integrated circuits 34, 40 nor does the profile of the integrated circuits 34, 40 need to be based on the profile of the housing in order for the integrated circuits 34, 40 to fit in the housing.

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<sup>16</sup> Appeal Brief at pages 19–21.

<sup>17</sup> See *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997), and *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005)(citations omitted).

<sup>18</sup> *Id.* at paragraph [0010].

The mere fact that the integrated circuits 34 or electronic components are “arranged to fit into the housing that possesses non-linear angles”<sup>19</sup> does not disclose or suggest that the arrangement of the integrated circuits 34 or electronic components of the Weinberg ‘260 device is based on or has any relationship whatsoever to a non-linear profile of the housing 12. Therefore, Weinberg ‘260 fails to anticipate Appellant’s claim 1, which requires a medical device comprising integrated circuits or discrete components that are arranged on respective surfaces of a circuit board to substantially conform to a first predetermined non-linear profile that is based on a second non-linear profile of the housing.

The Examiner asserted that “the specification does not provide sufficient antecedent basis or explanation of what is considered to be the second non-linear profile,” and, therefore, “the components [of Weinberg ‘260] are in fact arranged in a non-linear profile with respects to second non-linear profile of the housing.”<sup>20</sup> However, Weinberg ‘260 fails to provide any suggestion that any “rounded corners” of the housing segments 62, 76 influence the arrangement of the integrated circuits 34, 40 on the platform 36 and substrate 38, as the Examiner suggests. The arrangement of the integrated circuits 34, 40 on the platform 36 and substrate 38 in the Weinberg ‘260 device is independent of the “rounded corners” of the housing segments 62, 76. On the other hand, claim 1 requires the integrated circuits or discrete components to be arranged on respective surfaces of a circuit board to substantially conform to a first predetermined non-linear profile that is based on a second non-linear profile of the housing.

For at least these reasons and the reasons discussed in the Appeal Brief, Weinberg ‘260 fails to anticipate Appellant’s claim 1 and claims 9 and 19–21, which depend from claim 1. Therefore, the rejection of claims 1, 9, and 19–21 as being anticipated by Weinberg ‘260 should be reversed.

### **CLAIM 10**

Claim 10 requires the discrete components of claim 1 to be arranged on the second surface of the circuit board such that the heights of the discrete components predominantly

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<sup>19</sup> Examiner’s Answer at p. 14.

<sup>20</sup> Examiner’s Answer at p. 14.

decrease from an edge of the second surface of the circuit board to a center of the second surface of the circuit board. In the Examiner's Answer, the Examiner reiterated the assertion that FIG. 6 of Weinberg '260 illustrates components 72 farthest to the right and left that are shorter than the three components in the center.<sup>21</sup> However, the Examiner did not provide any support for this assertion other than reference to FIG. 6 of Weinberg '260, which Appellant maintains does not illustrate components 72 that are arranged to predominantly decrease from an edge of a second surface of the circuit board to a center of the second surface of the circuit board. As discussed in the Appeal Brief,<sup>22</sup> Weinberg '260 does not disclose the heights of the electronic components 72. Thus, the detailed description provided by Weinberg '260 fails to support the Examiner's assertion that Weinberg '260 discloses each and every element of claim 10.

For at least these reasons and the reasons discussed in the Appeal Brief, the rejection of claim 10 as being anticipated by Weinberg '260 should be reversed.

#### **CLAIM 15 AND 18**

Claim 15 requires a housing to comprise a feedthrough on a side surface that is oriented at a non-parallel, non-perpendicular angle relative to a major surface of the housing. The Examiner asserted that claim 15 is anticipated by Weinberg '260. For at least the reasons discussed below with respect to independent claim 32, Weinberg '260 fails to anticipate claim 15, as well as claim 18, which depends from claim 15. Reversal of the rejection of claims 15 and 18 is respectfully requested.

#### **CLAIMS 32 AND 35**

While the Examiner provided a response to Appellant's arguments with respect to claims 32 and 35 in the Examiner's Answer, the Examiner failed to further clarify the rejection of claims 32 and 35. For example, the Examiner failed to identify a feedthrough in the Weinberg '260 reference. As discussed in the Appeal Brief, the Examiner appears to be relying on an

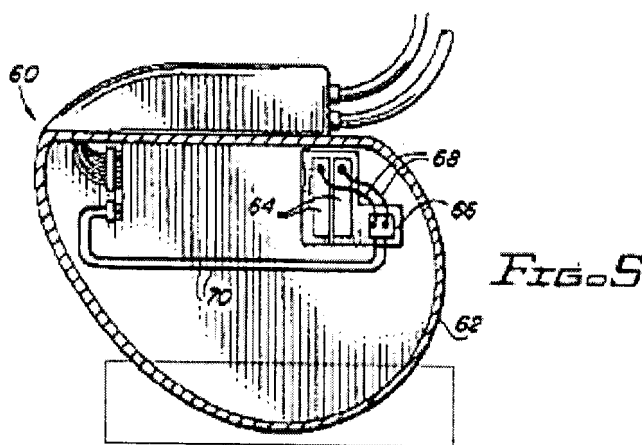
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<sup>21</sup> Examiner's Answer at p. 15.

<sup>22</sup> Appeal Brief at pp. 21 and 22.

improper finding of an inherent disclosure to support the rejection of independent claim 32 (as well as the rejection of claims 15, 18, and 35).<sup>23</sup>

In the Examiner's Answer, the Examiner asserted that because "the mains surface [of the Weinberg '260 device housing] is curved . . . the feedthroughs are thus located at a 'non-parallel, non-perpendicular angle.'"<sup>24</sup> However, Weinberg '260 does not even mention a feedthrough, much less illustrate an orientation of the feedthrough relative to the "main surface" of the Weinberg '260 device, which the Examiner identified via a box in the modified version of FIG. 5 of Weinberg '260 provided by the Examiner (reproduced below).



Because of the failure of Weinberg '260 to disclose a feedthrough, it is clear that Weinberg '260 does not disclose a feedthrough that has the claimed orientation relative to the designated "major surface" of the housing, as apparently asserted by the Examiner. The Examiner has provided absolutely no disclosure in the Weinberg '260 to support the assertion that any feedthrough of the Weinberg '260 device has the claimed relationship to the alleged "major surface" of the device housing.

For at least the reasons and the reasons presented in the Appeal Brief, reversal of the rejection to claims 32 and 35 is respectfully requested.

<sup>23</sup> Appeal Brief at p. 23.

<sup>24</sup> Examiner's Answer at p. 15.

#### FOURTH GROUND OF REJECTION UNDER APPEAL

In the final Office Action dated December 9, 2008, the Examiner rejected claims 22, 25, 26, 28–32, 34, and 35 under 35 U.S.C. § 102(e) as being anticipated by Engmark. Appellant addressed this rejection in the Appeal Brief. In the Examiner's Answer, the rejection of claims 22, 25, 26, 28–32, 34, and 35 under 35 U.S.C. § 102(e) as being anticipated by Engmark was not presented as a ground of rejection. Therefore, it appears that the Examiner has withdrawn the rejection of claims 22, 25, 26, 28–32, 34, and 35 under 35 U.S.C. § 102(e) as being anticipated by Engmark. However, the Examiner did not explicitly state that the rejection based on Engmark was withdrawn.

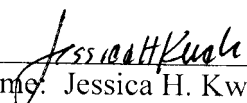
#### CONCLUSION

For at least these reasons and the reasons discussed in Appellant's Appeal Brief, the Examiner has failed to meet the burden of establishing a *prima facie* case of nonpatentability with respect to Appellant's claims 1–15, 17–32, and 34–36. In view of Appellant's arguments present in this Reply Brief and in the previously-filed Appeal Brief, the final rejection of Appellant's claims was improper and should be reversed. Reversal of all pending rejections and allowance of all pending claims is respectfully requested.

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